Center for Educational Performance and Information (CEPI)

Michigan Student Data System (MSDS)

Technical Support Document

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Questions?
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Introduction

The following documentation is designed to supplement the Michigan Student Data System (MSDS) "help" documents. Both should be reviewed prior to accessing MSDS. Successful use of the system may require work from both the user and the school's local technical support staff. There are some steps to perform in preparation for using the application that may require technical assistance.

Browser and System Suggestions

Internet Explorer (6.0 or higher) is the preferred browser for all CEPI applications. While it is possible to use a Firefox (1.5 – 3.0) browser to access CEPI applications, please be advised that these applications do not function as well in Firefox as they do in Internet Explorer. For example, many Firefox users report that pages format improperly or the appearance of data is not preserved when using the "back" and "forward" buttons. The problem is not with the application, but with the functionality built inside the Firefox browser.

For best display, view the application with a minimum monitor resolution of 800 X 600.

If necessary, Windows users can change the resolution of their monitors by going to the **START** button, selecting **SETTINGS**, then **CONTROL PANEL**, then **DISPLAY, and then selecting the Settings tab**. You may also place your mouse pointer on the desktop (on the background, not on an icon), click the right mouse button and choose **PROPERTIES**.

Go to the **Desktop Area** setting, and slide the screen resolution over to 800 x 600. It is recommended that you do not try a higher desktop resolution than this until you have read your monitor manual to see what maximum resolution it supports.
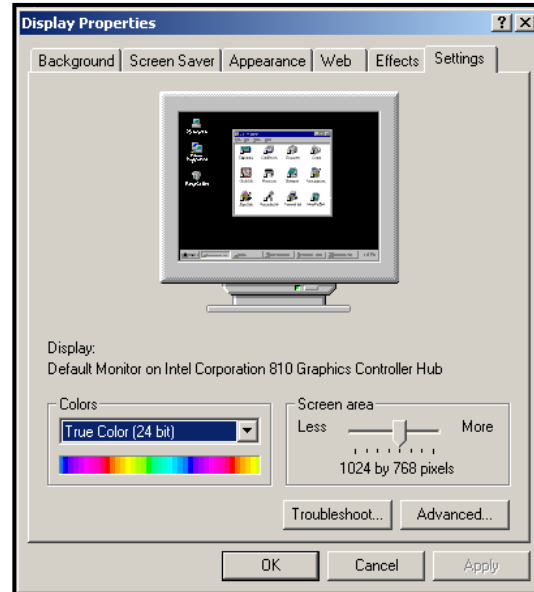
Pop-up Blockers

CEPI makes use of pop-up windows in its applications to display important information for authorized users. If your computer has a pop-up blocker installed, it may prevent a CEPI application window from opening. Many pop-up blockers allow users to reconfigure software settings to allow pop-up windows from certain Web sites. If the pop-up blocker installed on your computer does not have this feature, please seek assistance from your local technical support staff. Another option would be to disable the pop-up blocker on your computer while you are accessing CEPI applications.

If you are not sure if pop-up-blocking software is installed on your computer, please run a test by visiting pop-uptest.com.

Listed below are some common pop-up blockers, as well as links to their support pages. Locate your software in the list below and then follow the link for more information about how to configure the software to allow pop-up windows when using CEPI applications. If you require further assistance, discuss this issue with your technical support staff.

- FireFox Web Browser
- Google Toolbar
- Microsoft Windows XP (SP2)
- Norton Internet Security
- Panicware Pop-Up Stopper
- StopZilla
- Yahoo! Toolbar
- Zone Alarm (user forum)

Web Services Plan

MSDS is using a phased development process. While the initial launch of the system will not include Web services, future phases will. Detailed information will be made available when these services are opened for external use.

Authentication and Security

MSDS utilizes the Michigan Single Sign-On application for user authentication. The link below will take you to CEPI's MSDS Web page, which contains directions for obtaining access in the Single Sign-On User's Guide. In addition, the MSDS Security Agreement and other support documents are also available (look in the box labeled security):
http://www.michigan.gov/cepi/0,1607,7-113-986_50502---,00.html

A note to users: once a session begins within the application, it can only be ended by closing all browser windows when completed.

Using XML Documents

XML files downloaded from the applications may be imported into a Microsoft Access database or Microsoft Excel, if desired (version XP or higher). In addition, there are a large selection of commercial and freeware XML applications available beyond the Microsoft Office products. No matter which application is used to view the XML file, formatting may vary depending on the contents of your XML data file, but the fields will be labeled appropriately. Resource guides on how to utilize Microsoft Office applications to view XML data are listed below:

- Importing Data in Microsoft Excel 2007:
  http://office.microsoft.com/en-us/excel/HP102064051033.aspx?pid=CH100648521033

- Importing Data in Microsoft Excel 2003:
  http://office.microsoft.com/en-us/excel/HP010423511033.aspx?pid=CH010503791033

- Importing Data in Microsoft Access 2007:
  http://office.microsoft.com/training/training.aspx?AssetID=RC102722321033

- Importing Data in Microsoft Access 2003:
  http://office.microsoft.com/en-us/access/HP051876101033.aspx?pid=CH063648351033

XML Validation

The MSDS will not process files if they are not validated against the schema.

If you are struggling with validating your XML files against the schema, please note that there are several freeware, shareware, and commercial products currently available for doing this. Following are two examples of this type of product:

1. XML Notepad: a free download from the Microsoft Web site
   http://www.microsoft.com/downloads/details.aspx?familyid=72d6aa49-787d-4118-ba5f-4f30fe913628&displaylang=en
2. Altova XMLSpy: this is an example of a for-purchase product
   http://www.altova.com/products/xmlspy/xml_editor.html

Macomb Intermediate School District continues to update its freeware product, SRSD02, to provide MSDS file extracts. This tool may also be a solution to ensure valid files.

XML Data-Type Definitions and Patterns Used in MSDS

The data-type descriptions provided in the collection component spreadsheets are descriptive only; the schema is the official reference for all data types. MSDS collection schemas reference the World Wide Web Consortium (W3C) definitions for the base data types. Following is a crosswalk of the data type descriptions to the data-type definitions used in the schemas, and corresponding links to the W3C.

Data Type Description	W3C Data Type Definition	Link to W3C Description
Text (numbers and letters)	Definition: The **string** data-type represents character strings in XML. Pattern: A-Z (upper case) a-z (lower case) and numbers (0 - 9)	http://www.w3.org/TR/xmlschema-2/#string
Numeric Text (can have leading zeros)	Definition: The string data-type represents character strings in XML. Pattern: Numbers only (0-9) Numbers may have leading zeroes Example : 000123.	http://www.w3.org/TR/xmlschema-2/#string
Alphabetic (letters only)	Definition: The string data-type represents character strings in XML. Pattern: A-Z (upper case) a-z (lower case)	http://www.w3.org/TR/xmlschema-2/#string
Long Text (more than 255 characters)	Definition: The **string** data-type represents character strings in XML. Pattern: A-Z (upper case) a-z (lower case) and numbers (0-9)	http://www.w3.org/TR/xmlschema-2/#string
Whole Number (integer)	Definition: **Integer** is derived from decimal by fixing the value of "fractionDigits" to be 0 and disallowing the trailing decimal point. This results in the standard mathematical concept of the integer numbers. The value space of **integer** is the infinite set {...,-2,-1,0,1,2,...}. The base type of **integer** is decimal Pattern: Numbers 0 - 9 without decimals	http://www.w3.org/TR/xmlschema-2/#integer
Decimal Number	Definition: **Decimal** represents a subset of the real numbers, which can be represented by decimal numerals. Pattern: Numbers 0-9 with decimal digits separated by a period.	http://www.w3.org/TR/xmlschema-2/#decimal
List Of Values (choose from list)	Pattern: Select one of the values provided in the list.	
Yes/No (or true false, or boolean)	Definition: Boolean has the value space required to support the mathematical concept of binary-valued logic: {true, false} Pattern: yes [or] no, true [or] false, 1 [or] 0	http://www.w3.org/TR/xmlschema-2/#boolean

Data Type Description	W3C Data Type Definition	Link to W3C Description
Date (only)	Definition: The value space of **date** consists of top-open intervals of exactly one day in length on the timelines of date time, beginning on the beginning moment of each day (in each timezone), i.e. '00:00:00', up to but not including '24:00:00' (which is identical with '00:00:00' of the next day). Pattern: cccc-mm-dd	http://www.w3.org/TR/xmlschema-2/#date
Time (Only)	Definition: T**ime** represents an instant of time that recurs every day. Pattern: hh:mm: ss:sss	http://www.w3.org/TR/xmlschema-2/#time
Text (free form)	Definition: The **string** data-type represents character strings in XML. Pattern: A-Z (upper case) a-z (lower case) and numbers (0 - 9)	http://www.w3.org/TR/xmlschema-2/#string
School Year (9999-9999)	Definition: The string data-type represents character strings in XML. Pattern: Tow sets of four-digit Numbers from 0-9 separated by a hyphen Example:2001-2202	http://www.w3.org/TR/xmlschema-2/#string
Names (letters, apostrophes, commas, hyphens, periods)	Pattern: A-Z (uppercase) a-z (lower case) Comma, hyphen, period	http://www.w3.org/TR/xmlschema-2/#string
Numeric Text (0-6) (can have leading zeros)	Definition: The string data-type represents character strings in XML. Pattern: Numbers only (0 - 6) Numbers may have leading zeroes Example:000123.	http://www.w3.org/TR/xmlschema-2/#string
Addresses (numbers, letters, #)	Definition: The string data-type represents character strings in XML. Pattern: A-Z (uppercase) , a-z (lower case) , numbers (0 - 9), # sign.	http://www.w3.org/TR/xmlschema-2/#string

Open-Source Software Issues

As open-source software packages such as OpenOffice.org become more prevalent, your local education agency (LEA) may choose to utilize these products. Please note that the State of Michigan produces and tests office documents using Microsoft Office 2003 and does not test files for OpenOffice.org compatibility. While the majority of files and formatting will work among these applications, they will not be perfect in every case. Check the OpenOffice.org Web site for news of future releases and additional compatibility issues.

Using ZIP Files

MSDS makes use of ZIP archives for uploading and downloading data. ZIP functionality is native functionality for Windows XP and beyond. Below are instructions for using that feature.

To Zip:
1. Right click the file(s)/folder(s) you want to zip.
2. Hover over "Send To" in the context menu.
3. Click "Compressed (zipped) Folder."

The zipped file(s) will be located in the same folder from where the file(s) was selected.
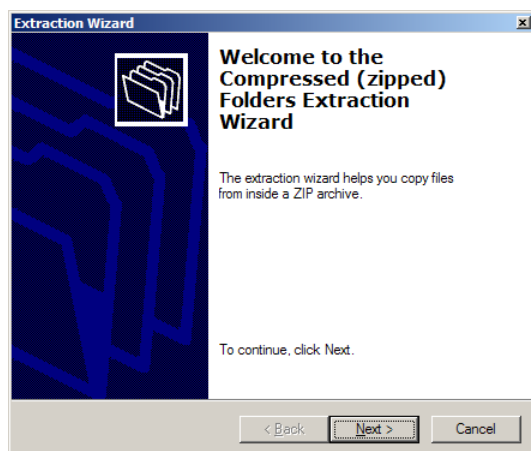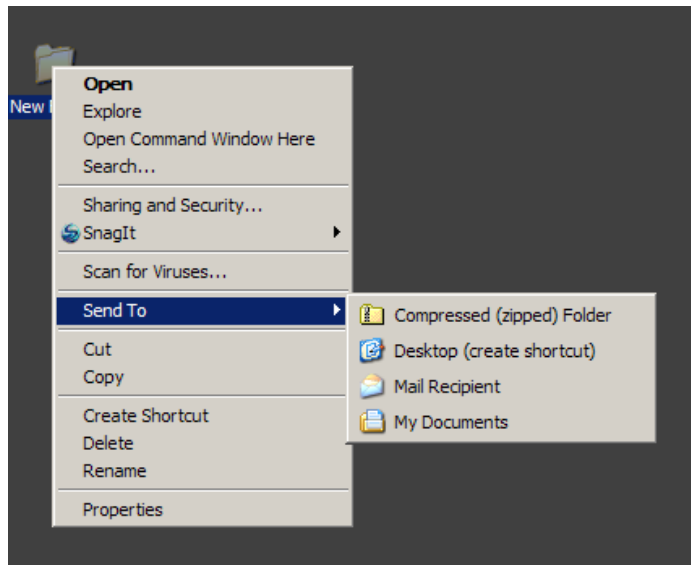
To Unzip:
1. Right click on any ZIP file
2. Click "Extract All…"
3. Follow the instructions on the Extraction Wizard.

If you require additional archiving functionality, there are commercial products available for purchase. In addition, several freeware options exist. A few of the more popular applications include 7-Zip, IZarc, and Filzip.